

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of operation of a networked device in a network having at least one other device, the method comprising acts of:

    sending a simple device description query message to the at least one other device requesting a simple device description;

    receiving from the at least one other device a simple device description message of defined length including a device type value representing the type of the at least one other device;

    if an extended device description is required by the network device, sending a query message to the at least one other device requesting an extended device description from the at least one other device if the simple device description indicates that the extended device description is available, otherwise not sending the query message to the at least one other device requesting the extended device description; and

if the extended device description is available on the at least one other device, receiving from the at least one other device the extended device description of variable length.

2. (Previously presented) The method according to claim 1, further comprising an act of establishing the network address the at least one other device before the act of sending a simple device description to the at least one other device.

3. (Previously presented) The method according to claim 1 or 2, wherein the simple device description message is in the form of a token-compressed message compressed from a human-readable message format, the simple device description message including a device type value representing the device type of the at least one other device; the device type value being selected from a device type hierarchy having predetermined top level elements including a controller device type and a basic device type, and at least one further level of subsidiary device types depending from the basic device type and inheriting properties of higher level device types on which the subsidiary device type depends, but not including any

further level of subsidiary device types depending from the controller device type.

4. (Previously presented) The method according to claim 3, wherein the networked device is a controller device comprising a list of device types that the controller can control.

5. (Previously presented) The method according to claim 4, the method further an act of determining whether the networked device can control the at least one other device by: determining the lowest level of device type that either is the device type of the at least one other device or is a higher level device type from which the device type of the at least one other device depends, in the list of device types that can be controlled by the controller, to determine the extent to which the networked device can control the at least one other device.

6. (Previously presented) The method according to claim 5, further comprising acts of:

receiving a controller query message including a requested device type value to request whether the controller is able to control a device of the requested device type; and

responding with a controller response message including a device type value representing the lowest level of device type in the list of device types that either is the requested device type or is a higher level device type from which the requested device type depends.

7. (Previously presented) The method according to claim 2, wherein the predetermined top level elements in the device type hierarchy further include a composite device type, and the networked device is of the composite device type having the functionality of an integer number of other devices, the method further comprising an act of:

responding to a received simple device description query message by sending a simple device description message including the device type value representing the device as a composite device and further an integer sub-device number being the number of other devices.

8. (Previously presented) A method of operation of a networked device to communicate with at least one of a plurality of second devices, the method comprising acts of:

receiving a simple device description query message from one of the plurality of second devices requesting a simple device description;

sending to the one of the plurality of second devices, a simple device description message of defined length including a device type value representing a type of the networked device;

receiving an extended device description query message from the one of the plurality of second devices requesting an extended device description from the networked device if said one of the plurality of second devices requires an extended device description; and

if the extended device description is available sending to the one device an extended device description of variable length.

9. (Currently amended) A networked device including a transceiver for sending and receiving messages and a message handler arranged

in a communication network with a plurality of second devices, the networked device being configured to perform acts of:

in response to receiving a simple device description query message from one of the plurality of second devices, sending to the one of the plurality of second devices, a simple device description message of defined length including a device type value representing a type of the networked device and indicating whether an extended device description is available; and

in response to receiving an extended device description query message from an other one of the plurality of second devices, sending to the other one of the plurality of second devices, an extended device description of variable length if the extended device description is available, otherwise ignoring the extended device description query message.

10. (Previously presented) The networked device according to claim 9, wherein the simple device description message is in the form of a token-compressed message compressed from a human-readable message format, the simple device description message including a device type value representing the type of the other device[[;]], the

device type value being selected from a device type hierarchy having predetermined top level elements including a controller device type and a basic device type, and at least one further level of subsidiary device types depending from the basic device type and inheriting properties of higher level device types on which the subsidiary device type depends, but not including any further level of subsidiary device types depending from the controller device type.

11. (Currently amended) A networked device, including a transceiver for sending and receiving messages and a message handler arranged in a communication network with a plurality of second devices, the networked device being configured to perform acts of:

sending a simple device description query message to one of the plurality of second devices requesting a simple device description;

receiving from the one of the plurality of second devices, a simple device description message of fixed length including a device type value representing a type of the one of the plurality

of second devices and a field indicating whether an extended device description is available;

testing the simple device description message to determine whether an extended device description is available;

sending an extended device description query message to the one of the plurality of second devices requesting an extended device description if the testing of the simple device description message indicates that there is an extended device description; and

receiving from the one of the plurality of second devices an the extended device description of variable length if the extended device description is available.

12. (Previously presented) The networked device according to claim 11, wherein the simple device description message is in the form of a token-compressed message compressed from a human-readable message format, the simple device description message including a device type value representing a type of the another device, the device type value being selected from a device type hierarchy having predetermined top level elements including a controller device type



and a basic device type, and at least one further level of subsidiary device types depending from the basic device type and inheriting properties of higher level device types on which the subsidiary device type depends, but not including any further level of the subsidiary device types depending from the controller device type.

13. (Previously presented) The networked device according to claim 12, wherein the networked device has the controller device type, wherein the networked device comprises a list of device types that can be controlled by the networked device, so that the networked device can determine the extent to which the networked device can control another device by determining the lowest level of device type that either is the device type of the one of the plurality of second devices or is a higher level device type from which the device type of the one of the plurality of second devices depends.

14. (Previously presented) The networked device according to claim 13, wherein the message handler is arranged:

to receive a controller query message including a device type value to request whether the controller is able to control a device of the requested device type; and

to respond with a controller response message including a device type value representing the lowest level of device type in the list of device types that either is the requested device type or is a higher level device type from which the requested device type depends.

15. (Currently amended) A system comprising:

a plurality of networked devices each having a transceiver for sending and receiving network messages;

at least one networked device of the plurality of networked devices being arranged to send a simple device query message to other devices of the plurality of networked devices and to receive and interpret simple device description messages subsequently received from the other devices of the plurality of networked devices;

the at least one networked device of the plurality of networked devices being arranged to send an extended device query

message to other networked devices and to receive and interpret extended device description messages subsequently received from the another devices;

each of the networked devices being arranged to respond to an incoming simple device query message from an other of the plurality of networked devices by sending a simple device description message of defined length including a device type value representing the type of the responding networked device and indicating whether an extended device description is available; and

at least one of the networked devices is arranged to respond to an incoming extended device query message from an other of the plurality of networked devices by sending an extended device description message if the extended device description is available, otherwise ignoring the extended device description query message.

16. (Previously presented) The system according to claim 15, wherein the plurality of networked devices includes at least one simple device without the capability to decompress messages and interpreting directly compressed messages and at least one complex

device including a message decompression arrangement for decompressing the messages and a message interpreter for interpreting the decompressed messages.

17. (Previously presented) The system according to claim 15 or 16, wherein the predetermined top level elements further include a composite device type; the system includes at least one networked device of the composite device type having the functionality of a predetermined number of other devices, the predetermined number being an integer greater than or equal to 2; and each of the at least one networked device of the composite device type responds to an incoming device query message requiring a simple device description by sending a simple device description including the device type as a composite device and a sub-device number representing the predetermined number of other devices.

18. (Previously presented) A computer program for controlling a networked device, the computer program being arranged to cause the networked device to carry out the acts of a method according to claim 1.

19. (Currently amended) A computer program for controlling a networked device, the networked device having a transport stack and an application, the computer program comprising:

code implementing a transport adaption layer for interfacing with the transport stack;

code implementing an application programming interface for interfacing with the application; and

code implementing a messaging layer including the capabilities of sending and receiving messages in a token-encoded human readable messaging format, the code being arranged to cause the networked device:

to recognize incoming device query messages requiring a simple device description response and to provide a simple device description response including a device type; and

to recognize incoming device query messages requiring an extending device description and to respond with an extended device description if the extended device description is available, otherwise ignoring the incoming device query messages.

20. (Previously presented) The computer program according to claim 18 or 19 recorded on a data carrier.

21. (Currently amended) A method of utilizing a network establishment and management protocol for controlling a plurality of electronic devices, the method comprising acts of:

providing a compression algorithm defining the mechanism for compression of said messages; ~~a definition of~~

defining a generic message format, the messages being compressed XML compliant messages; and

defining message sequencing requirements, wherein said plurality of electronic devices include at least one device capable of recognizing only a compressed message and providing only a simple value to represent a description of its type, wherein said plurality of electronic devices include at least one other device capable of recognizing the compressed message and providing an extended device description if the extended device description is available, and wherein the compressed message indicates if the extended device description is available.

22. (Currently amended) A system utilizing a network establishment and management protocol for controlling a plurality of electronic devices, the system comprising:

a mechanism for compression of messages in accordance with a compression algorithm;

a means for defining a generic message format, the messages being compressed XML compliant messages; and

a means for defining message sequencing requirements, wherein said plurality of electronic devices include at least one device capable of recognizing only a compressed message and providing only a simple value to represent a description of its type, wherein said plurality of electronic devices include at least one other device capable of recognizing the compressed message and providing an extended device description if the extended device description is available, and wherein the compressed message indicates if the extended device description is available.